## REMARKS

This Amendment, filed in reply to the Office Action dated February 2, 2007, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-12 and 18-49 are all the claims pending in the application.

### I. Claim Rejections under 35 U.S.C. § 102

Claims 18, 21, 24, 26-28 and 49 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Liang (U.S. Patent No. 5,579,031).

### II. Claim Rejections under 35 U.S.C. § 103

Claims 1-2, 7-8 and 45-48 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liang (U.S. Patent No. 5,579,031) in view of Ng (U.S. Patent No. 5,185,661).

Claims 3-6, 9-12, 29-31, 33-35, 37-39 and 41-43 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liang (U.S. Patent No. 5,579,031) in view of Ng (U.S. Patent No. 5,185,661) and Keating (U.S. Patent No. 5,619,434).

Claims 19-20, 22-23 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liang (U.S. Patent No. 5,579,031) in view of Keating (U.S. Patent No. 5,619,434).

Claims 32, 36, 40 and 44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liang (U.S. Patent No. 5,579,031) in view of Ng (U.S. Patent No. 5,185,661), Keating (U.S. Patent No. 5,619,434) and Dundas (U.S. Patent No. 5,604,567).

As a preliminary matter, Applicant submits that the final rejection of claim 1 is premature. Claim 1 was merely amended to include the features of prior pending claims 50 and 51. In the prior Office Action dated August 17, 2006, all of claims 1, 50 and 51 were rejected as being unpatentable over Liang alone. See page 12 of August 17, 2006 Office Action. Claims 50 and 51 were incorporated into claim 1 in the Amendment dated November 17, 2006, thereby presenting the same subject matter in claim 1 that was previously pending by way of claim 51. The Examiner cannot properly reject claim 1 over a new combination of Liang and Ng on a final basis. Therefore any amendments proposed herein should be entered as a matter of course.

The Examiner now acknowledges that Liang does not teach all features of the prior pending claims 50-51 (now included in claim 1) and cites Ng to make up for the deficiencies. Applicant respectfully submits the following arguments in traversal of the rejection over Liang and Ng.

Liang is described in the November 17 Amendment on the second page of the Remarks. Applicant refers the Examiner to this description. Applicant emphasizes that Liang teaches device-dependent color corrections dC, dM and dY are provided in a correction generator 176. Col. 11, lines 36-38. On the other hand, the Lab values in Liang are not converted but serve as a baseline for all YMC-Lab conversions. Col. 11, lines 59-67.

Ng relates to a method of mapping in-gamut and out of gamut colors. Referring to Fig. 3, a transform matrix 18 converts separation signals R' G' B' into uniform color space coordinates L*'a*'b*'. The space is optimized by a 3 x 3 matrix but includes errors associated with a non-color matching function. Therefore, the L*'a*'b*' values are input to a tri-linear (three

dimensional) look up table 20 and interpolation circuit 22. In this manner, the input values are indexed to the truest color, which includes non-linear mapping in the out of gamut range. See Abstract.

The Examiner continues to contend that Liang includes a conversion between Lab (device -independent) spaces. Applicant submits that col. 11, lines 59-67 of Liang suggest there is no such conversion. The L'a'b' conversions in each of Model 1 and Model 2 serve as a baseline references from conversions of YMCK. There is no disclosure of a change in either Lab model. For example, the data of Model 1, 140 is not used to change the data of model 2, 142. Rather, the difference in the values of Lab and L'a'b' are used to produce dC, dM, dY for color conversion. The Examiner has failed to rebut this argument for withdrawal of the rejection.

The Examiner now correctly concedes that Liang does not teach converting first colorimetric data to second colorimetric data using a direct conversion. The Examiner cites Ng to make up for the deficiency. The rejection cannot be supported. This is because the conversions of Ng and Liang operate in completely different ways. In Ng, a three dimensional look up must take place in order to provide the Lab conversions. The Examiner contends that this will increase the processing speed of Liang. However, the multi-dimensional look up will not increase the speed because of the increased number of values that must be extracted and the accompanying number of interpolations that will be made. If anything, the use of the conversion in Ng would slow the conversion process of Liang. Generally, interpolations in three-dimensional lookup tables take longer computation time than those in one-dimensional lookup tables. There are mainly two types of interpolation method in three-dimensional lookup tables; a

trilinear interpolation (eight grid points used in a three dimensional space) disclosed in Ng, and tetrahedral interpolation (four grid points used in a three dimensional space) disclosed in Appendix A of Liang (USP 5,579,031). It is known that the tetrahedral interpolation is faster. Therefore, the Examiner's rationale does not support the rejection.

Further, assuming arguendo that the references may be combined, their combination does not teach each feature of claim 1. Claim 1 describes an independent space - to - independent space conversion using a one-dimensional look up. To the extent that Liang may teach a one dimensional look up (Fig. 8, element 142 cited by the Examiner), the conversion is between YMCK and Lab which are not both device-dependent spaces. To the extent that the Examiner relies on Ng to teach an Lab conversion, the conversion is via a three dimensional look up table. Thus, it is clear that each rejection has deficiencies such that their combination does not result in the features of claim 1. As a related matter, it is noted that one skilled in the art would not substitute any one dimensional look up for a three dimensional look up because this would result in an insufficient number of indices. Therefore, claim 1 is patentable over Liang and Ng.

Because claims 2 and 7-8 include the features of claim 1, these claims also patentable for the reasons set forth above. Claims 45-48 are cancelled without prejudice or disclaimer.

With regard to independent claim 18, this claim describes correction of device independent color spaces. The Examiner continues to cite Fig. 6, element 122 and Fig. 8 of Liang to teach this feature. However, Fig. 6 of Liang clearly shows a Y'M'C'K' conversion to YMCK via the adaptor 122. The YMCK values correspond to known device dependent spaces. Fig. 8 of Liang teaches a YMCK conversion to Lab. This also does not comprise conversion

between independent spaces. As discussed above in connection with claim 1, no Lab conversions are performed in Liang. Therefore, the Examiner's rejection of claim 18 over Liang is not supportable. The Examiner has offered to rebuttal to these prior submitted arguments.

Because claims 21 and 24 include features similar to claim 18, claims 21 and 24 are also patentable for the reasons set forth above. The remaining claims 26-28 and 49 are patentable based on their dependency.

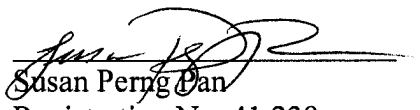
The remaining claims are also patentable based on their dependency. The additional Keating and Dundas references do not make up for the deficiencies of Liang alone or the combination of Liang and Ng.

Claim 52 is added to eliminate any need for interpolation after independent color space conversion and print output.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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